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EXAMINER
NGUYEN, CUONG H

ART UNIT	PAPER NUMBER
3625	

DATE MAILED: 01/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

Application No.	Applicant(s)
08/919,450	Harrison
Examiner	Art Unit
Cuong H. Nguyen	3625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____3____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *Nov 18, 2002 (the IDS)* _____ .

2a) ☐ This action is **FINAL.**   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-35* _____ is/are pending in the application.

    4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-35* _____ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11) ☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

    a)☐ All b)☐ Some* c)☐ None of:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    *See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) ☒ Notice of References Cited (PTO-892)

16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). *16*

18) ☐ Interview Summary (PTO-413) Paper No(s). _____

19) ☐ Notice of Informal Patent Application (PTO-152)

20) ☐ Other:

DETAILED ACTION

1.   This Office Action is the answer to the CPA (filed on 10/05/1999), IDSs (1/29/2001, 11/18/2002, and 11/08/2002).

2.   Claims **1-35** are pending in this application.

Drawings

3.   This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> *(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.*

4. <u>In view of claims 1, 20</u>: These claims are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sisley** et al. (US Pat. 5,737,728).

Sisley et al. teach a system and method for assigning and scheduling resource requests to arrive at near-optimal assignment and scheduling solutions; these system and method are similar to a computer-aided technician dispatch system that comprises means/steps using means:

- a communications system linking to subscribers, a team of technicians, and service representative, and a user (see **Sisley** et al., col.1 lines 41-56);

- an input terminal for receiving information, said

information comprising:

- service request information from subscribers

(see **Sisley** et al., col.1 lines 41-56);

- work order information from a team of

technicians (see **Sisley** et al., col.1 lines 41-56);

- technician information (see **Sisley** et al., col.2

lines 27-59);

- a server coupled to the input terminal for processing

a service request information and for generating a graphic

representation of that service request information (see

Sisley et al., Fig.1); and,

- a display for receiving a graphical representation of

the service request information and for presenting said

graphical representation to a user (see **Sisley** et al.,

Figs.9-10, col.4 lines 62-67).

Sisley et al. suggest about <u>checking allotment of time</u>

<u>for successfully finishing an assignment</u> as below; it is

used for checking quota information (see **Sisley** et al.'s

patent: "*In addition to sequencing the calls assigned to a*

particular technician, the potential schedules generated by the

scheduler module 24 also must fit the calls into time segments.

The schedule stress calculation and the critical call

determination depend heavily on the time at which a call is to

be scheduled in the schedule sequence. Thus, when the scheduler

module 24 selects one of the calls assigned to a technician to

be placed next in the sequence of a potential schedule, it must

also determine a start time and a completion time for that call.

The process by which the scheduler module 24 fits the calls into

time segments for a particular technician is dependent on the

organizational calendar stored in calendar data structure 34,

and the technician's calendar stored in the technician set data

structure 28."

See also submitted IDS that contains **Oba** (US Pat.

5,241,465), which discloses: *"The general controller 1301*

judges whether or not a processing time taken from the start to

the step 1406 of generating another solution exceeds the

consideration time stored in the consideration limit time table

108 (step 1407). The determination of the processing time not

exceeding the consideration limit time causes the general

controller 1301 to return to the processing of the step 1403.

The determination of the processing time exceeding the

consideration limit time causes the general controller 1301 to

activate the evaluator 111. The evaluator 111 selects the

optimum case for the selected improvement evaluation item from

the already generated solutions (step 1408), displays the

optimum case and terminates its processing (step 1409).

Detailed Description Text (47):

As has been disclosed in the foregoing in accordance with the

present invention, the determination of a scheduling strategy

and the execution of the scheduling strategy are repetitively

carried out according to a schedule situation in a solution

generation step to generate an initial solution, an evaluation

value of the above-generated latest solution is calculated to

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select an optimum solution for the calculated evaluation value

of the evaluation item to be improved from already-generated

solutions in an evaluation step, a branch for improving the

evaluation value of the improvement evaluation item at high

possibility is selected at a position as close to the initial

state as possible to return the schedule situation to that state

during generation of the optimum solution in an optimization

step, one of scheduling strategies which has a high possibility

of improving another evaluation value different from that at the

time of finding the optimum solution of the already-generated

solutions is executed, and thereafter the aforementioned

solution generation step is executed to generate a new solution.

Since such processing is repeated as long as possible within an

allowable time to sequentially improve the evaluation value of

each evaluation item and thereby to generate the optimum

solution, there can be realized a computer-aided scheduling

system which can improve a plurality of evaluation functions and

can efficiently generate an optimum solution in various sorts of

scheduling problems...".

Moreover, **Sisley** et al. suggest that the tracking and

delivery/distribution time of an assignment are critical and

have been taken into account for "calculating a job time"

(see also the submitted IDS about **Harker** et al. US Pat.

5,177,684 or **Nathanson** US Pat. 5,122,959).

- skill information (this would includes skill levels

and quota for time allotment (for each assignment) see

Sisley et al., col.9 lines 28-37).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention for using the invention of **Sisley** et al. to come up with a dispatching system/method as in claims 1/20; because the addition of quota information makes received information for a task assignment more accurate and complete.

5. In view of claims **2-8, 10-11,** and **17-19, 21-30, 32-33**:

These claims are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sisley** et al. (US Pat. 5,737,728), in view of **Ehlers** et al. (US Pat. 5,572,438).

The rationales for the rejection of claim 1 is incorporated herein.

The examiner submits that it is obvious to artisan that these following features are well-known in a common dispatching/communications system:

A.   Re. Claims **2, 26**: using a telephone.

B.   Re. Claims **3, 27**: using a portable computer.

C.   Re. Claims **4, 28**: using a facsimile machine.

D.   Re. Claims **5, 29**: using an electronic mail.

E.   Re. Claims **6, 30**: using a radio.

F.   Re. Claim **7**: displaying of service requests on a display.

G.   Re. Claim **8**: displaying of work order information on a display.

H.   Re. Claims **10, 32**: a service requests is showed in a service request window (this is merely a very common feature

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in a computerized society for improving accuracy and avoiding ambiguous in communication).

I.   Re. Claims **11, 33**: work order information are showed in a work order window (this has been merely a very common feature in a computerized-age society for improving accuracy and avoiding ambiguous in communication).

J.   Re. Claims **17, 20**: The examiner submits that it is obvious that a service information has been comprises:

        - schedule information (e.g., start and end time) location information of a service (see **Sisley** et al., col.28 lines 1-25); and

        - technician's skill information (this would includes skill levels and quota for time allotment (for managerial of each assignment and/or customer-requested information) see **Sisley** et al., col.9 lines 28-37).

K.   Re. Claims **18, 22**: The examiner submits that it is obvious that schedule information comprises:

        - schedule hour and area information (see **Sisley** et al., col.28 lines 1-25); and

L.   Re. Claim **19**: The examiner submits that it is well-known that a service information have been edited by a user (see also US Pat. 5,133,081 paragraphs #32-33, 40 of the detailed description).

M.   Re. Claims **23-25**: The examiner submits that it is obvious for a person with skill in the art to suggest a step of:

        - updating equipment; or

- updating equipment comprises refreshing a converter
(turning a power switch **off** and **back on**); or

- updating equipment comprises adding a converter
(e.g., updating equipment if necessary to make sure a
service in good conditions .etc.).

6.   Claims **9, 31, 12-16** are rejected under 35 U.S.C. 103(a)
as being unpatentable over **Sisley** et al. (US Pat.
5,737,728), in view of **Pickett** et al. (US Pat. 5,761,278).

The references for rejection of claim 1 are
incorporated herein.

In addition to **Sisley** et al.'s suggestions:

A. Re. Claims **9, 31**: **Pickett** et al. (**'278**) also suggests a
graphical representation for directions (see **Pickett** col.2,
lines 27-34); (or see also Excite engine in World-Wide-Web
(Internet) for a map creation of a location from Yellow
Pages).

It would have been obvious to one of ordinary skill in
the art at the time of invention for using a map as
suggested by **Pickett** to implement **Sisley** et al.'s invention
because the addition of graphical direction information have
been used to makes a task assignment helpful and more
accurate.

B. Re. Claim **12**:   The examiner submits that it is obvious
that schedule information comprises:

- schedule hour and area information (see **Sisley** et
al., col.28 lines 1-25); and

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<u>C. Re. Claims **13-16**</u>: The references for rejection of claim 1 are incorporated herein. The examiner submits that it is obvious that:

- **Sisley** et al.'s server comprises an assignment order processing means.

- **Sisley** et al.'s server obviously comprises a technician information processing means.

- **Sisley** et al.'s server comprises an automatic routing means (see **Sisley** et al., col.17 lines 34-38, and col.21 lines 8-12).

- **Sisley** et al.'s server comprises an assignment order generating means (see **Sisley** et al., Fig.10).

7.   Claims **34-35** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sisley** et al. (US Pat. 5,737,728), in view of **Durand** et al. (US Pat. 6,272,467), or in view of **Sobotka** et al. (US Pat. 5,197,004).

The references for rejection of claim 1/20 are incorporated herein.

Level of difficulties or complexities (as claim) have been used by point/character for indication a difference in skill comparison. This has been recognized by **Durand** et al. (US Pat. 6,272,467) having US Patent classification 705/26 "method of doing business"; **Durand** et al. disclose:

"Detailed Description Text (65):

(j) Composite Heterosexual Female Education Bonus 107--The matching program 3 next checks whether the user is a female seeking to match with a male, as specified in the sexual_preference field 33 of the user's

preference profile 18. If this is the case, the matching program 3

increases the Adjusted Compatibility Score by 13.2 points if the

education_level 29 indicated in the potential match's trait profile 17

is greater than that indicated in the female user's trait profile 17.

This compatibility score adjustment represents a behavioral science

finding that heterosexual women place a premium on dating educated

men...".

Or **Sobotka** et al. (US Pat. 5,197,004) also disclose:

"Detailed Description Text (31):

If there are no more indicators for the particular job category,

SKILL.sub.-- PTS are added to the job category point total for each

skill indicator whose related buzzwords have contributed at least

SKILL.sub.-- THRESHOLD points at step 7.4. In step 7.5 (code function

"Threshold", Appendix 1), the job category point total is compared with

the MIN.sub.-- THRESHOLD. If the job category point total is less than

the MIN.sub.-- THRESHOLD, the category point total is reset to zero. The

job category point total is returned to the previously described

categorization process (see steps 5.4, FIG. 5) at step 7.6.".

It would have been obvious to one of ordinary skill in
the art at the time of invention for using points for
comparison as suggested by **Sobotka et al./Durand et al.** to
implement **Sisley** et al.'s invention because the addition of
this information have been used to makes a task assignment
more accurate.

Conclusion

7. Claims **1-35** are not patentable.

8. The previous cited references are considered pertinent to claimed limitations.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cuong H. Nguyen whose telephone number is 703-305-4553. The examiner can normally be reached on Mon.-Fri. from 7:15 AM to 3:15 PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Wynn Coggins, can be reached on (703)308-1344.

Any response to this action should be mailed to:

Amendments

Commissioner of Patents and Trademarks
Washington D.C.   20231

or faxed to:
  (703)305-7687   [Official communications; including
                  After Final communications labeled
                  "Box AF"]

  703-746-5572 (RightFax) Informal/Draft communications,
labeled "PROPOSED" or "DRAFT"]

Hand delivered responses should be brought to Crystal Park 5, 2451 Crystal Drive, Arlington, VA, 7th floor receptionist.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Receptionist whose telephone number is (703)308-1113.

Cuonghnguyen
Dec. 17, 2002

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